

Bachelor of Engineering (Honours) [Embedded] (Electrical and Electronic Engineering) – Bachelor of Science (Science Major)

(MA1020 – Preparatory Mathematics Required)

Useful study planning/enrolment resources:

[Course and Subject Handbook](#)

[Academic Calendars](#)

[Class Registration](#)

[Enrolment Resources](#)

The information in the study planner is current at the time of creation may be subject to future change.

Attention International Student visa holders: To remain compliant with your enrolments requirements as a Student visa holder you are required to enrol in at least one On-Campus, Multi-Modal or WIL subject offering in each compulsory study period and you cannot enrol in more than one third (33%) of your total course load through online or distance learning. To complete your course within your CoE duration students must maintain sufficient subject enrolment.

If there are only Online subject offerings for you to select in a compulsory study period, contact enrolments@jcu.edu.au urgently for enrolment advice.

The College of Science and Engineering will be offering some subjects in Block 1 and Block 2 (see the [Academic Calendar](#) for Block 1 and 2 dates). International students must maintain enrolment in subjects across the whole Trimester 1 period (January – April) and can do this by enrolling in a combination of TR1, Block 1 and/or Block 2 subjects.

Please note: The trimesters in which subjects are offered vary by major. Refer to the JCU Handbook for details on when subjects in your major are available.

	TRIMESTER 1	TRIMESTER 2	TRIMESTER 3
2026	EG1000:03 Engineering 1	MA1000:03 Mathematical Foundations <i>PREREQ: MA1020 or MA0020 or BR0202 or High school subjects: Mathematical Methods or Specialist Mathematics (or equivalent such as Maths B or Maths C)</i>	EG1011:03 Statics and Dynamics <i>PREREQ: Allow concurrent enrolment in PH1005</i>
	EG1002:03 Computing and Sensors	PH1005:03 Newtonian Physics <i>PREREQ: Maths B or MA1020 or MA0020 or MA1000 or MA1008 OR admission to 116209, 116409 or 116309. Allow concurrent for MA1020, MA1000 and MA1008</i>	EG1012:03 Electric Circuits
	MA1020:03 Preparatory Mathematics	Engineering Major CP1407:03 Introductory Machine Learning and Data Science	MA1003:03 Mathematical Techniques <i>PREREQ: MA1000 or MA1011 or MA1009</i>

*Studying all EG Level 1 subjects in 1st year is recommended as this provides the required knowledge to determine your major pathway (for a total of 9 subjects this year) This choice also allows for a lighter 7-subject load in your final year when completing your thesis.

	TRIMESTER 1	TRIMESTER 2	TRIMESTER 3
2027	MA2000:03 Mathematics for Scientists and Engineers <i>PREREQ: MA1003</i>	Science Major	EG1010:03 Process Engineering
	Engineering Major CC2511:03 Digital Logic and Embedded Systems <i>PREREQ: EG1002 or CP1404 or CP1401 or Admittance into Master of Engineering (Professional)</i>	Science Major	Engineering Major CP1404:03 Programming II <i>PREREQ: CP1801 or CP1401 or CP1200 or EG1002 or CP2200 or SC1201</i>
	Science Major		Engineering Major EE2300:03 Electronics and Circuit Design <i>PREREQ: EG1012</i>

	TRIMESTER 1	TRIMESTER 2	TRIMESTER 3
2028	SC2202:03 Quantitative Methods in Science <i>PREREQ: SC1102 or SC1109 or Admission to 116209, 116309 or 116409</i> OR SC2209:03 Quantitative Methods in Science – Advanced <i>PREREQ: MA1003 and SC1109, plus 6 credit points of other Level 1 Subjects</i>	Engineering Major EE2201:03 Circuit Theory <i>PREREQ: EG1012 and MA2000. Allow concurrent enrolment for MA2000.</i>	Engineering Major EE3400:03 Power System Analysis <i>PREREQ: EE2201 or Admission to the Master of Engineering (Professional)</i>
	Science Major	Engineering Major PH2019:03 Electromagnetism and Optics <i>PREREQ: (EG1012 or PH1005) and MA1003</i>	Science Major
	Select 3 credit points of any Level 2, 3 or 5 Science Subject		Science Major

2029	Vac work (Dec-Feb)	TRIMESTER 2	TRIMESTER 3
	Time available for work placements with engineering employers	Engineering Major CC3501:03 Embedded Systems Design and Interfacing <i>PREREQ: (CC2511 and CP1404) or Admittance to the Master of Engineering (Professional)</i>	Engineering Major EE3600:03 Automation and Control Systems <i>PREREQ: (EG1012 and MA2000) or Admittance into the Master of Engineering (Professional)</i>
	BLOCK 2 (Mar-Apr)	Engineering Major EE3010:03 Digital Signal Processing <i>PREREQ: 48 credit points from the Bachelor of Engineering or Admission to the Master of Engineering (Professional)</i>	Engineering Major EE3700:03 Communications Systems Principles <i>PREREQ: EE2201</i>
	BLOCK 2 (Mar-Apr)	Engineering Major EE3300:03 Electronics Applications <i>PREREQ: EE2300 or Admittance to the Master of Engineering (Professional)</i>	Science Major

2030	Vac work (Dec-Feb)	TRIMESTER 2	TRIMESTER 3
	Time available for work placements with engineering employers	EG4011:03 Thesis Part 1 of 2 <i>PREREQ: 60 credit points</i>	EG4012:03 Thesis Part 2 of 2 <i>PREREQ: EG4011</i>
	BLOCK 2 (Mar-Apr)	Engineering Major EE4500:03 Electrical and Electronic Systems Design Project <i>PREREQ: 48 credit points in Bachelor of Engineering, Bachelor of Engineering – Bachelor of Science or Bachelor of Engineering – Bachelor of Information Technology</i>	Select 3 credit points of any Level 2, 3 or 5 Science Subject <i>*Note: Students are encouraged to select SC3003:03 Science Research Internship</i> OR SC3008:03 Professional Placement <i>*Students wishing to enrol in SC3003 must have a minimum GPA of 5.5 and a supervisor for their internship.</i>
	BLOCK 2 (Mar-Apr)	Engineering Major EE4600:03 Control System Design <i>PREREQ: EE3600 or Admission to the Master of Engineering (Professional)</i>	

COURSE HANDBOOK

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